

REMARKS

The Final Office Action of September 11, 2006 has been carefully considered. Reconsideration of this application, entry of the proposed amendments, and allowance of the remaining claims is respectfully requested.

Non-elected claims 19 and 20 have been canceled without prejudice or disclaimer to the subject matter therein. Applicants believe entry of the amendments will advance prosecution of the instant application or at least place it in better form for appeal.

Office Action Summary

The Examiner finalized the prior restriction requirement, and prosecution continues relative to elected claims 1 – 18. Claims 1-4, 7-12, 14 and 16-18 were rejected under 35 USC §103(a) as being unpatentable over Rachkov et al. (6,681,481) in view of Edwards (3,387,906). Claim 13 was rejected under 35 USC §103(a) as being unpatentable over Rachkov et al. in view of Edwards and Applicants admitted prior art. Applicants again acknowledge the Examiner's indication that claims 5, 6 and 15, although objected to, would be allowable if rewritten to include the limitations of the base and any intervening claims.

The above-identified amendments are respectfully proposed for entry in order to place the application in condition for allowance. The amendments proposed were not previously presented as Applicants challenged the Examiner's restriction. In view of the restriction requirement having been made final, Applicants now cancel non-elected claims 19 and 20 without prejudice so that such claims may be further pursued.

Prior Art Rejection – Obviousness

Applicants respectfully traverse the rejection of claims 1-4, 7-12, 14 and 16-18 as being both an improper combination/modification, and as failing to teach all of the elements recited in the claims.

Rachkov discloses a connector system for connecting an electronic microdevice feeder to an electronic assembly line (col. 1, lines 17-19). Rachkov discloses that the

microdevice feeder is attached to an assembly line table 12 for an assembly line 13, in one of a plurality of slots 16 in the table.

The rejection characterizes the "plurality of spaced alignment slots 16" (col. 1, lines 49-51) taught by Rachkov as the claimed "docking channel operatively affixed to the feeder platform," yet Rachkov clearly describes (col. 3, lines 44-52) and shows (e.g., Fig. 1) that **the slots 16 are in the table 12**. Thus, not only does Rachkov fail to teach a docking channel, it further fails to teach or suggest that a docking channel (see e.g., reference numeral 150 in Applicants' Specification and Figures – e.g., FIG. 1) is "operatively affixed to the feeder platform" as specifically recited in the rejected independent claims.

The Examiner clarified, in the Final Action, what was intended as the alleged teaching of Applicants' recited parallel grooves in the docking channel. The Examiner refers, for support, to col. 3, line 66 – col. 4, line 2. The disclosure therein is excerpted below:

The guide rail 42 has a train rail cross-section across its width and engages with an inverted Tee cross-section which makes up one of the alignment slots 16 in the assembly line table 12. The guide rail 42 restricts vertical and lateral movement of the microdevice feeder 30."
(col. 3, line 65 – col. 4, line 2)

Clearly, guide rail 42 is the inverted train rail member on the bottom of the feeder, and it is in contact with the parallel alignment slot 16 in order to prevent movement of the feeder. Not only does Rachkov fail to teach a pair of parallel grooves in a docking channel, but the requirement for contact between the guide rail 42 and the slot 16 would appear to preclude the use of rollers as recited in the rejected independent claims.

At the top of page 3 in the Final Office Action, the Examiner states that, "Rachkov et al. fail to teach the use of a guide rail but fail to teach the use of rollers for inserting the component-feeding machine into the docking channel. " Applicants respectfully contend that this statement confirms Applicants' assertions as to the failure in the alleged teachings of Rachkov et al. In the event the rejection is maintained, Applicants respectfully request that the Examiner address the apparent contradictions in regard to the teachings of Rachkov.

Recognizing that Rachkov does not teach rollers, the Examiner then relies upon Edwards disclosure of a roller drawer support, wherein tapered rollers 34 and 36 are used to suspend one end of a drawer from an overhead rail 14. Edwards describes the rollers 34 and 36 as either being in contact with the lower recess surfaces 81 and 82 or with the upper recess surfaces 83 and 84, suggesting that the rollers are free to move depending upon where the center of gravity of the drawer lies. Such a teaching is entirely contrary to the teachings of Rachkov, where the guide rail is intended to restrict vertical and lateral movement of the microdevice feeder 30. Thus, it is respectfully urged that one of skill in the art would not have been motivated to combine the teachings, let alone how one might go about modifying Rachkov to accommodate the rollers of Edwards. *Where would one place Edwards' rollers on Rachkov's guide rail?* Absent teaching or suggestion of such a modification, Applicants respectfully challenge whether the references are properly combined or modified, or whether the motivation for such a combination really has been the claims of the instant application.

Applicants further submit that not only would the Edwards' suspension roller configuration interfere with the operation of the Rachkov microdevice feeder, but that the two patents clearly teach away from one another – Rachkov relies on a guide rail that restricts vertical and lateral movement, whereas Edwards teaches the advantages of just such movement (e.g., col. 4, lines 26-42). Accordingly, Applicants respectfully contend that the patents relied upon for the rejection are not properly combined and that *prima facie* obviousness has not been established.

As the basis for the arguable combination of Rachkov in view of Edwards, the Examiner asserts that one of ordinary skill in the art would have been motivated to make the arguable combination/modification in order to reduce friction. Applicants question why one would have been so motivated when Rachkov clearly teaches that the invention “allows for the simple, easy installation and removal of the microdevice feeder with precision vertical and horizontal alignment...” (col. 5, lines 20-23). *What was it that taught or suggested that friction was a concern or a problem to be dealt with for Rachkov's feeders?* Applicants respectfully request that the Examiner show support for the assertion that one of ordinary skill in the art would have been motivated to reduce friction in the Rachov device by adding wheels.

Considering, *in arguendo*, the combination of Rachkov and Edwards, Applicants respectfully urge that that such a combination fails to disclose, as described above, the feeder platform having docking channels operatively affixed to the platform as recited in previously amended independent claims 1 and 10. Nor is there a disclosure in either patent of rollers affixed to a component feeding system, where the rollers are received by the parallel grooves within the docking channel.

In view of the above-noted arguments in traversal of the rejection of claims 1 and 10, Applicants respectfully urge that the independent claims are not obvious in view of the arguable combination of Rachkov and Edwards. Moreover, claims 2-4, 7-9, 11, 14 and 16-18, dependent therefrom, are also urged to be in condition for allowance. For the sake of brevity Applicants have not presented arguments relative to the dependent claims but reserve the right to do so upon appeal or further prosecution of the application.

With respect to the separate rejection of claim 13, the Examiner urges that the plurality of interchangeable devices that may be mounted in accordance with the claimed invention is obvious in light of Applicants recitation of exemplary devices. Applicants respectfully incorporate the above-noted arguments in traversal of the combination of Rachkov and Edwards.

With respect to the addition of Applicants' disclosure as the basis for the rejection of claim 13, Applicants respectfully urge that the Examiner has improperly relied upon Applicants' disclosure and claims as the basis for the alleged combination. Specifically, the Examiner urges that "it would have been obvious to one of ordinary skill in the art at the time of [sic] the invention was made to utilize a plurality of "types" of component feeding systems, as taught by AAPA..." Applicants urge that the present application is being relied upon for just such a suggestion. If not through rejected claim 13, then through the teachings of the Specification, which expressly states,

"Prior attempts at delivering chips or components directly from wafer to circuit board have either not been successfully implemented or the industry has not accepted them because they are often aftermarket accessories having a rather unwieldy footprint with difficult interfacing that consumes significant space on the feeder platform. This difficulty in integration results in reduced interest in use of integrated direct die

feeding systems. However, the present invention is based on discoveries which overcome the disadvantages of the present “dedicated” fixed mounting of direct die feeding system by significantly improving the installation and integration of direct die and similar feeders within the existing placement machinery, without requiring a permanently committed space within the feeder bay. With the utilization of the present patent a direct die feeding system enjoys substantially the same portability attributed to a traditional tape and reel feeder.”


(Specification; p. 3, line 24 – p. 4, line 5 – emphasis added)

As Applicants previously pointed out, there are difficulties with adapting some feeders so that they may be attached to an assembly system. The invention presently claimed addresses the problem of adapting various feeders to an assembly system and provides an efficient and reliable mounting device for overcoming such difficulties. Accordingly, Applicants respectfully urge that the Examiner has failed to establish that the information alleged to be admitted prior art was known to those of ordinary skill in the art, or that even if it were, whether there was any motivation, outside of the instant application, for making such a combination.

In view of the foregoing remarks and amendments, reconsideration of this application and allowance thereof are earnestly solicited. In the event that additional fees are required as a result of this response, including fees for extensions of time, such fees should be charged to USPTO Deposit Account No. 50-2737 for Basch & Nickerson LLP.

In the event the Examiner considers personal contact advantageous to the timely disposition of this case, the Examiner is hereby authorized to call Applicant's attorney, Duane C. Basch, at Telephone Number (585) 899-3970, Penfield, New York.

Respectfully submitted,



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